

THE STATUS OF THE GOLDEN EAGLE (*AQUILA CHRYSAETOS*) IN HUNGARY

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ABSTRACT.—This paper describes the colonization of Hungary by Golden Eagles (*Aquila chrysaetos*) and the increase of the population from 1 pair in 1985 to 4 pairs in 1999. It documents the breeding performance each year (1985–99) and lists food items collected at nests during this period.

KEY WORDS: *Golden Eagle*; *Aquila chrysaetos*; *Zemplén Mountains*; *Hungary*; *colonization*.

El estado de el águila real (*Aquila chrysaetos*) en Hungría

RESÚMEN.—Este artículo describe la colonización de Hungría por las águilas reales (*Aquila chrysaetos*) y el incremento de la población desde la 1 pareja en 1985 a 4 parejas en 1999. Documenta el desempeño reproductivo cada año (1985–99) y lista los ítems alimenticios colectados en los nidos durante este periodo.

[Traducción de César Márquez y Victor Vanegas]

Although the Golden Eagle (*Aquila chrysaetos*) has been recorded from time to time in Hungary, it was not documented as a nesting species until the mid-1980s. Herein, I report the results of surveys conducted in the Zemplén Mountains of northeastern Hungary that document the current breeding population of four pairs.

STUDY AREA AND METHODS

The Zemplén Mountains are situated in northeastern Hungary and they belong to the Inner Carpathian system which is of volcanic origin. They extend 55–60 km from north to south and 15–20 km from east to west occupying an area of about 1430 km². Elevations range from 400–500 m and the principal vegetation types consist of Carpathian beech forests (*Deschampsio-Fagetum*), oak forests on nonlime soils (*Genisto tinctoriae-Quercetum petraeae*), and hornbeam-oak forests (*Carpinetum* spp.-*Querceto petraeae*).

I searched the mountains thoroughly for evidence of Golden Eagle breeding. Once a pair of eagles was located, the area was searched systematically to find each nest. Breeding behavior was monitored from February when nesting first began. Observations were made with great care to avoid disturbing the eagles. Where nests were accessible, the young were banded and food remains were collected from around each nest.

RESULTS

During the early 1980s, immature Golden Eagles were observed each year in the Zemplén study area. Several nests were built, but breeding did not occur. In 1985, a pair occupied a breeding territory and built and rebuilt a nest, but no young were raised. In 1987, two pairs of eagles were located.

One pair did not breed but the other pair successfully raised one young (Table 1). In 1993, two new pairs of eagles were found. One pair nested in what was traditionally a productive Imperial Eagle (*A. heliaca*) nest, taking over the territory from an Imperial Eagle that had been unmated for some time. The Golden Eagle pair bred and successfully fledged young from this nest. The second new pair of eagles that was found did not build a nest in 1993. I constructed an artificial nest in a location in the territory where the eagles were seen perching during the day and roosting at night and the pair subsequently used this nest. In 1994, a pair of Golden Eagles again occupied the Imperial Eagle territory. In earlier years, the two species had coexisted and successfully bred within 1 km of each other. The pair of eagles occupied the artificial nest again in 1994. This time, they raised one young which died from unknown causes when it was about 8 wk of age. Currently, all four pairs of Golden Eagles continue to occupy breeding territories in the Zemplén study area and several other unpaired eagles have been observed in surrounding areas.

Golden Eagles in Hungary have a relatively catholic diet, feeding on a wide range of birds and mammals (Table 2).

CONSERVATION

Information on breeding performance of the pairs of Golden Eagles in Hungary is given to au-

Table 1. Breeding history of Golden Eagles in Hungary since 1985.

YEAR	NUMBER OF NESTING PAIRS	NUMBER OF NESTLINGS	NUMBER OF FLEDGLINGS
1985	1	0	0
1986	1	0	0
1987	1	0	0
1988	2	1	1
1989	2	1	1
1990	2	2	1
1991	2	0	0
1992	2	2	2
1993	2	0	0
1994	2	0	0
1995	4	3	2
1996	4	2	2
1997	4	5	4
1998	4	2	2
1999	4	2	2
Total	4	20	17

thorities responsible for the conservation and protection of nature in the region. These records help to keep protection policy up to date and to guide any restrictions on agricultural and forestry activity in the region. Relationships with foresters in the region are good and on several occasions they have provided observations on Golden Eagles.

Table 2. Prey species recorded at nest sites of Golden Eagles in Hungary.

PREY SPECIES	NUMBER OF ITEMS
Fox (<i>Vulpes vulpes</i>)	9
Rabbit (<i>Oryctolagus cuniculus</i>)	7
Deer (<i>Odocoileus</i> spp.)	4
Pine martin (<i>Martes martes</i>)	3
Mouflon (<i>Ovis musimon</i>)	1
Badger (<i>Meles meles</i>)	1
Cat (<i>Felis domesticus</i>)	1
Wild boar (<i>Sus scrofa</i>)	1
Common vole (<i>Microtus arvalis</i>)	1
Ring-necked Pheasant (<i>Phasianus colchicus</i>)	11
Ural Owl (<i>Strix uralensis</i>)	4
Unidentified birds	2
Woodpecker (<i>Picidae</i>)	1
Pigeon (<i>Columba livia</i>)	1
Chicken (<i>Gallus gallus</i>)	1
Magpie (<i>Pica pica</i>)	1

ACKNOWLEDGMENTS

I wish to thank all of those who with their frequent observations have contributed to the preservation of this species over the past years. Also, I would like to thank them for their useful observations that have helped extend our knowledge of the species in Hungary. In particular, I thank I. Béres, L. Losonczi, Z. Petrovics, and Z. Szegedi. Special thanks are due to J. Balogh who gave advice on the manuscript, and to B. Solti who analyzed the food remains.